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## **CONTROLLER OF ELECTRIC RAILCAR**

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- 43.4 (ELECTRIC POWER--- Applications)
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- R131 (INFORMATION PROCESSING--- Microcomputers & Microprocessors)

### **Abstract:**

**PURPOSE:** To improve the adhesive performance by comparing the intrinsic vibrating frequency component of the self-excited vibration of a wheel shaft with the maximum allowable amplitude reference, and controlling the tension of a motor so that the component becomes constant.

**CONSTITUTION:** A digital filter DF produces an intrinsic vibrating frequency component as a preslip phenomenon of the self-excited vibration detected by a torque sensor TS. A comparator CPR compares the maximum allowable amplitude reference REF proportional to a wheel speed added with the maximum allowable amplitude reference AS of the component and a main motor induced voltage with an output from the filter DF. A creep controller SC receives an output from the comparator CPR, outputs a control signal for controlling the creepage, and an amplifier AMP inputs a control signal from the controller SC, an acceleration current command IP and a main motor current IM, and outputs a gate signal to a chopper CH. (From: *Patent Abstracts of Japan*, Section: M, Section No. 526, Vol. 10, No. 304, Pg. 105, October 16, 1986)

### **JAPIO**

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